Amendments to the Specification

Amend paragraph [0006] as follows:

[0006] The four necessary ingredients of high fidelity software simulation in order to accurately simulate the actual hardware are: 1) high fidelity algorithms, 2) accurate representation of state machines, 3) high fidelity transactions and 4) high fidelity timing. Most of the industry high fidelity simulators come with the ingredients #1, 2, and 3. Ingredient #4, one of the most important, to validate timing, is either approximated or detailed. Timing approximation is implemented in a functional simulator by running flight software on a workstation by either cross-compiling or writing highly portable code. Timing detail is implemented by running the flight software on a simulated CPU. Timing approximation does not provide high fidelity simulation. Timing detail provides high fidelity simulation, but cannot keep-up with the performance of the real hardware. High fidelity simulators, in order to be usable by a large community of software developers, should provide reasonable performance usually equal to or better than real hardware.

Please amend paragraph [0025] as follows:

[0025] The slave launcher submodule further comprises a slave launcher synch submodule and where the slave launcher submodule, upon receiving a command from form the master launcher submodule, requests the corresponding slave deployment submodule via the slave launcher synch submodule to advance the

slave deployment submodule by a predetermined number of virtual clock ticks and to stop, after which the slave deployment submodule suspends operation and waits for the slave launcher submodule to resume operation.

Please amend paragraph [0046] as follows:

[0046] FIG. 3 shows a complete VRT based system with one master launcher module 304 controlling the master deployment module 301 and slave launcher module 307. The system shows one master controlling one slave, but more slaves could be easily added. The master diagram blocks 301, 302, 303, 304, 305 and 306 in FIG. 3 are identical to blocks 201, 202, 203, 204, 205 and 206 in FIG. 2 respectively. Slave launcher 307, upon receiving command form master launcher 304, requests its slave deployment 309 via slave launcher synch 308 to advance slave deployment 309 by x number of ticks and to stop. The slave deployment 309 waits for slave launcher 307 to resume the process.

Amendments to the Specification

Please approved of the following amendments

Amend Fig. 1 to provide a lead line for Test Master 107.

Amend Fig. 4 at step 406 to show "Increment K by 1".

Proposed sketches are attached to the Appendix.